

# (12) UK Patent Application (19) GB (11) 2 076 179 A

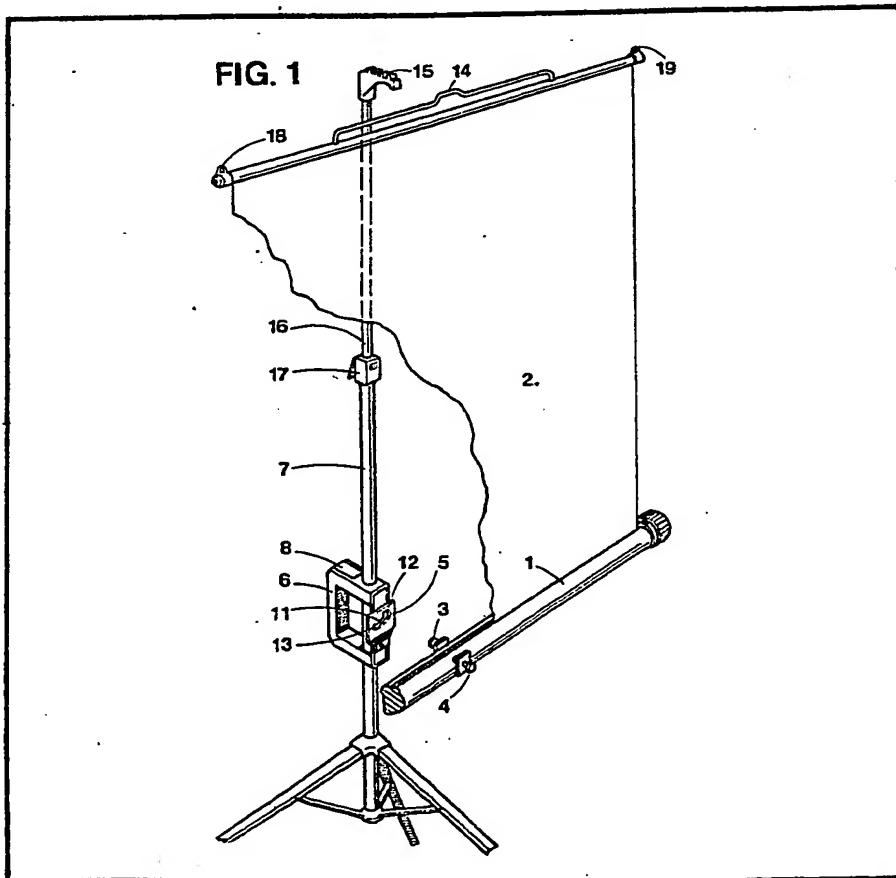
(21) Application No 8114643  
(22) Date of filing 13 May 1981  
(30) Priority data  
(31) 3924/80  
(32) 20 May 1980  
(33) Switzerland (CH)  
(43) Application published  
25 Nov 1981  
(51) INT CL<sup>3</sup>  
G03B 21/58  
(52) Domestic classification  
G2X 42  
(56) Documents cited  
GB 1440531  
GB 1036019  
GB 649385  
GB 609602  
(58) Field of search  
G2X  
(71) Applicant  
AB Mekanika Verken,  
Fabriksgatan 4, S-56041  
Mullsjö, Sweden  
(72) Inventor  
Ernest Guinand  
(74) Agent  
Gee & Co.,  
Chancery House,  
Chancery Lane, London  
WC2A 1QU

## (54) Projection Screen Assembly

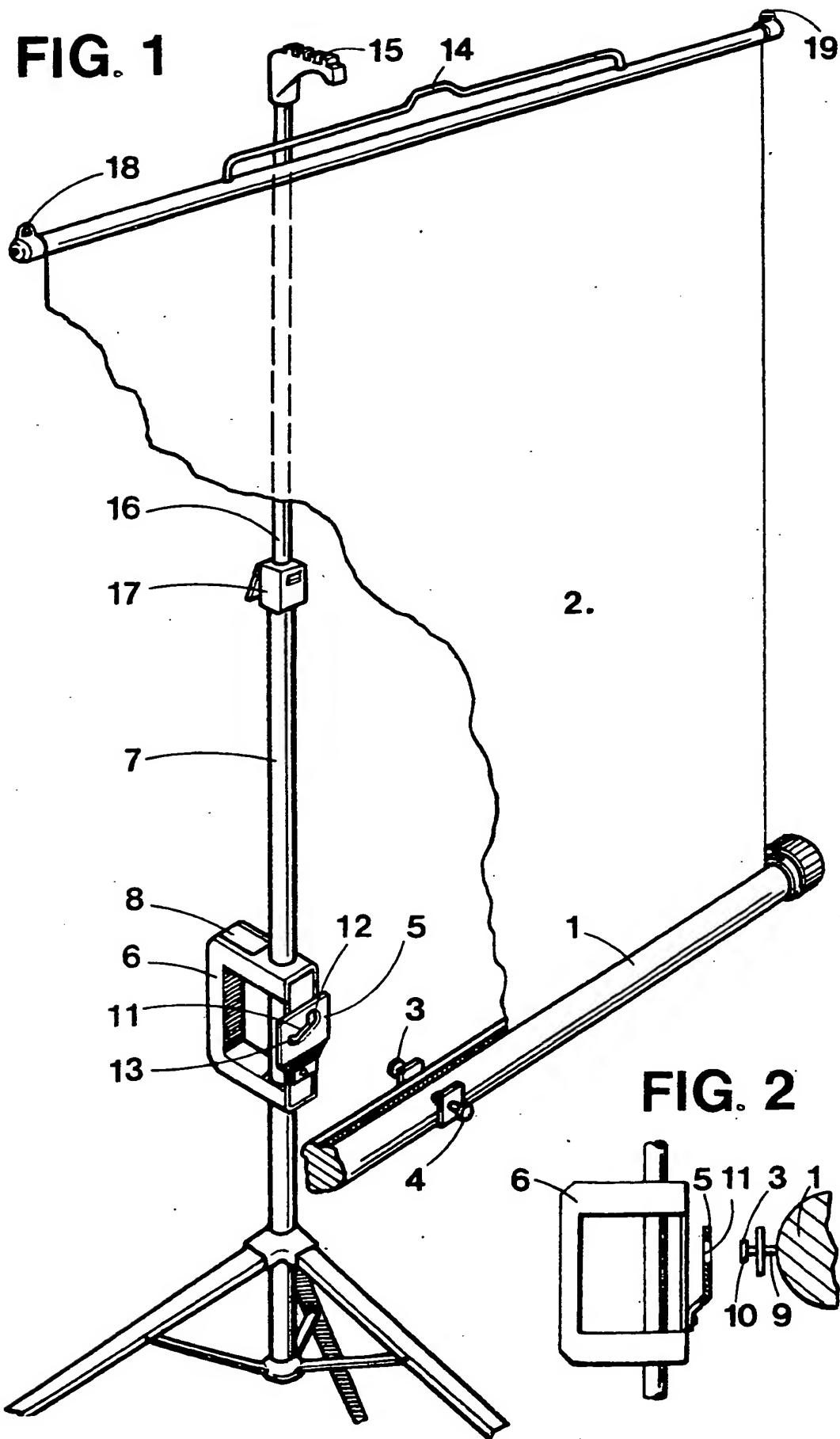
(57) A projection screen for the projection of cine film or transparencies is of the type wherein the support has a tripod at its lower end and an elongated casing 1 containing the screen 2 is fixed to a handle 14 which is movable vertically upon the support. Complementary

means are provided, such as of the screw 3 and key-hole 12 type, on the casing and on the support, to allow the casing and contained screen to be rapidly detached from the support for use upon a wall or suspended from a ceiling.

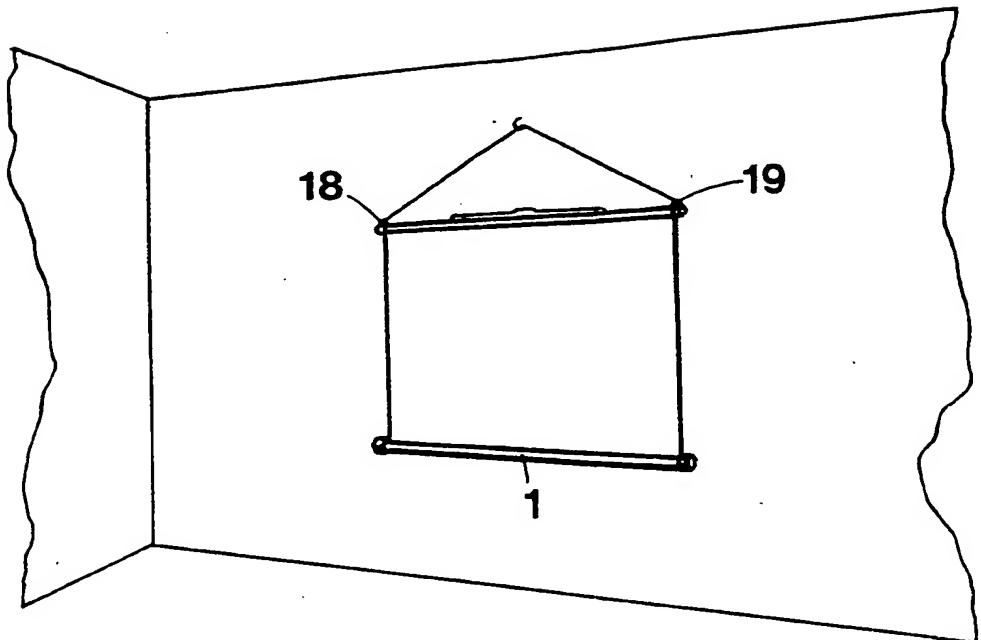
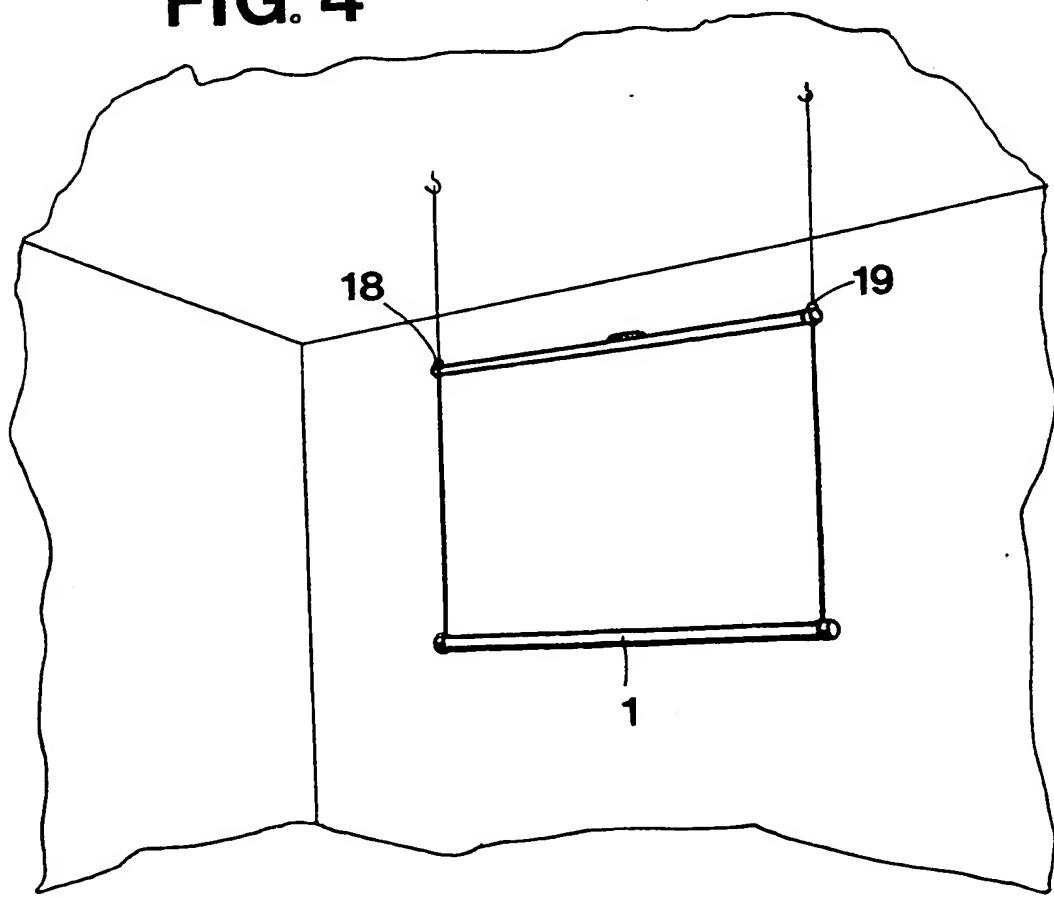
The screen may be a two-faced screen, in which case fixing means are provided on each side of the casing.



# FIG. 1



**FIG. 2**

**FIG. 3****FIG. 4**

## SPECIFICATION

### Projection Screen Assembly

This invention relates to screens of the type used for the projection of amateur cine film or transparencies, and which comprises a support having at its lower end a tripod (which may be retractable), which supports a vertical tube on which can be moved and fixed in a desired position a handle to which is fixed pivotably but not detachably an elongated case in which the screen is rolled up when it is not in use. Inside this vertical tube there can be a sliding shaft having at its upper part means for hanging the upper end of the screen when this has been pulled out from the case. This shaft can be fixed within the tube in any chosen position so that the screen is stretched.

The inconvenience of these known devices is that the case containing the screen is fixed to the support so that it cannot readily or rapidly be detached. Therefore, when it is desired to use a screen suspended on a wall or from the ceiling it is not possible to use the screen which is attached to the tripod support. Moreover, there are now available two-faced screens, the two faces of which have different qualities as regards the projection of the image; such two-faced screens cannot be used with the known tripod-mounted apparatus as described above.

The present invention provides a solution of these disadvantages and allows the same screen to be used either on a tripod support, or suspended from a wall or ceiling, and also allows one or other face of a two-faced screen to be used with a tripod support.

According to the invention, an assembly comprises a projection screen contained in a case in which it is held normally rolled up under the action of spring means, and a supporting structure on which the case can be pivotably mounted and to the upper part of which the upper edge of the screen may be fixed in its open position, wherein said case and support have complementary means for fixing them together whilst allowing rapid detachment of the case from the support.

The invention will be explained further by reference to the preferred embodiment shown in the accompanying drawings, wherein:

Fig. 1 is a perspective view showing the screen in open position carried on the support;

Fig. 2 is an enlarged transverse section of the assembly of Fig. 1;

Fig. 3 shows schematically the screen detached from the support and suspended on a wall; and

Fig. 4 shows schematically the screen detached from its support and suspended from a ceiling.

Referring to Fig. 1, there is an elongated cylindrical case 1 in which a screen 2 is held in its closed position by known spring means (not shown), the upper side of the case having a slit from which the screen can be withdrawn. An elongated support 7 has a tripod at its lower part.

65 On the front and rear of the case 1 are provided two identical means 3 and 4 to allow the rapid fixing of the case to corresponding means 5 fixed to a handle 6, which is movable in known manner along the vertical support tube 7 and which can be fixed at a desired height by means of a friction means controlled by pressure on a button 8.

In the example shown, the means for rapidly attaching the case 1 to the handle 6 comprise, on the box 1, a screw 9 having a head 10, and on the handle 6 a plate 5 having an aperture 11 with a key-hole type enlargement 12 to allow the passage of the head 10. At its lower end, the window 11 turns slightly upwardly at 13 to keep the head 9 properly in place when the screen 2 is raised. The latter is accomplished by pulling a suspension bar 14 upwards and over a horizontal suspension piece 15 fixed to the top of extension tube 16 which slides within the support tube 7, means of known type 17 provided to fix the tube 16 in a desired position according to the desired height of unrolling of the screen 2.

By means of this arrangement one can almost instantly change the desired face of a two-faced screen to be used, by inserting either the head 3 or head 4 into the window 5. Moreover, one can instantly detach the case 1 containing the rolled up screen 2 from the support, in order to suspend it against a wall as shown in Fig. 3, or from a ceiling as shown in Fig. 4, by means of two eyes 95 provided at 18 and 19 at the top of the bar at the upper end of the screen.

Of course, other rapid fixing means can be provided in place of the means 3, 4 and 5 illustrated, provided that they allow rapid fixing and separation without the use of a tool or complicated operation.

The invention provides the advantages of allowing the user to rapidly separate in a single operation the case containing the screen from a tripod support or to rapidly refix the screen which has been supported on a wall or ceiling.

**Claims**

1. An assembly comprising a projection screen contained in a case in which it is held normally rolled up under the action of spring means, and a supporting structure on which the case can be pivotably mounted and to the upper part of which the upper edge of the screen may be fixed in its open position, wherein said case and support have complementary means for fixing them together whilst allowing rapid detachment of the case from the support.
- 110 2. An assembly according to Claim 1, wherein the screen is a two-faced screen and
- 115 3. An assembly according to Claim 1 or 2, wherein the upper edge of the screen is provided with means to allow suspension of the screen and its casing against a wall or from a ceiling.

4. An assembly as claimed in Claim 1, 2 or 3, wherein the attachment means are of the screw and key-hole type.

5. An assembly comprising a projection screen, substantially as hereinbefore described with reference to Figs. 1 and 2 of the drawings.

Printed for Her Majesty's Stationery Office by the Courier Press, Leamington Spa, 1981. Published by the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.